ELSEVIER

Volume 515, Numbers 1–2, 31 May 1996

Journal of Organometallic Chemistry

Contents

Regular Papers

Carbonylation of iron(II) halide in the presence of chelate diphosphine ligands. Molecular structure of a novel intermolecular adduct $[FeCl_2(dppe)_2][Fe_2(CO)_2Cl_4]$
Z.-Z. Zhang, J.-K. Zhang, W.-D. Zhang, H.-P. Xi, H. Cheng and H.-G. Wang (Tianjin, People's Republic of China) 1

Reactions of (η^6-diphenylacetylene) chromiumtricarbonyl complexes with polynuclear carbonyls. III. Reactions of $M_4(CO)_{12}$ (M = Rh, Co) clusters with $Cr(CO)_3(\eta^6\text{-}PhC_2Ph)$. Crystal and molecular structure of the $Rh_4(CO)_9(\mu_5,\eta^2{:}\eta^6\text{-}PhC_2Ph)Cr(CO)_3$ cluster
S.P. Tunik, P.N. Shipil', A.V. Vlasov, V.R. Denisov, A.B. Nikols'kii (St. Petersburg, Russia), F.M. Dolgushin, A.I. Yanovsky and Yu.T. Struchkov (Moscow, Russia) 11

Dinuclear phosphido- and arsenido-bridged early/late transition metal complexes. Efficient catalysts for ethylene polymerization
F. Lindenberg (Leipzig, Germany), T. Shribman (Haifa, Israel), J. Sieler, E. Hey-Hawkins (Leipzig, Germany) and M.S. Eisen (Haifa, Israel) . . 19

A second solid-state isomer of $[(PPh_3)_2N][Ru_6C(CO)_{15}(C_3H_5)]$: shift of the carbonyl and allyl positions on large cluster cores by crystal-packing force
T. Chihara (Saitama, Japan), K. Komori, H. Ogawa (Tokyo, Japan) and Y. Wakatsuki (Saitama, Japan) 27

Hydride derivatives of Group 4 metals with the *ansa*-$(SiMe_2)_2(\eta^5\text{-}C_5H_3)_2$ ligand
T. Cuenca, M. Galakhov, E. Royo and P. Royo (Alcalá de Henares, Spain) 33

Superlattice structure of octa-*tert*-butylpentacyclo[4.2.0.0^{2,5}.0^{3,8}.0^{4,7}]octasilane found by reinvestigation of X-ray structure analysis
K. Furukawa, M. Fujino and N. Matsumoto (Kanagawa, Japan) 37

[2 + 2]-Cycloadditionen eines Iminosilans—Synthese viergliedriger Heterocyclen
J. Niesmann, U. Klingebiel, S. Rudolph, R. Herbst-Irmer und M. Noltemeyer (Göttingen, Germany) 43

Selective synthesis of triphenoxysilane by the reaction of metallic silicon with phenol using copper(I) chloride as the catalyst
M. Okamoto, N. Watanabe, E. Suzuki and Y. Ono (Tokyo, Japan) 51

Synthesis and structure of titanium(III) tweezer complexes with embedded alkali metal ions: $[(\eta^5\text{-}C_5HMe_4)_2Ti(\eta^1\text{-}C{=}CSiMe_3)_2]^-M^+$ (M = Li, Na, K, and Cs)
V. Varga (Prague, Czech Republic), J. Hiller (Ulm, Germany), M. Polášek (Prague, Czech Republic), U. Thewalt and K. Mach (Prague, Czech Republic) 57

Some chemistry of $Re_2(\mu\text{-}H)(\mu\text{-}C_2Ph)(CO)_8$: X-ray structures of $Re_2(\mu\text{-}H)(\mu\text{-}C_2Ph)(CO)_6(PMe_3)_2$, $Re_2(\mu\text{-}Au(PPh_3))(\mu\text{-}C_2Ph)(CO)_8$, $Re_2(\mu\text{-}X)(\mu\text{-dppm})(\mu\text{-}C_2Ph)(CO)_6$ [X = H, Br and $Au(PPh_3)$] and $Re_2(\mu\text{-}Br)_2(\mu\text{-dppm})(CO)_6$
M.I. Bruce, P.J. Low (Adelaide, Australia), B.W. Skelton and A.H. White (Nedlands, Australia) 65

Synthesis and characterization of areneruthenium(II) dialkyldithiophosphate complexes: single crystal structure of $[Ru\{SSP(OEt)_2\}(\eta^6\text{-}p\text{-cymene})(PPh_3)][BPh_4]$
V.K. Jain and V.S. Jakkal (Bombay, India) 81

Mixed-metal cluster chemistry III. P–C activation at tungsten–triiridium cores; X-ray crystal structures of $[CpWIr_3(\mu_3\text{-}\eta^2\text{-}PPh(C_6H_4))(\mu\text{-}CO)_2(CO)_7]$ and $[CpWIr_3(\mu_3\text{-}\eta^2\text{-}PPh(C_6H_4))(\mu\text{-}CO)_2(CO)_6(PPh_3)]$
S.M. Waterman (Canberra, Australia), V.-A. Tolhurst (Armidale, Australia), M.G. Humphrey (Canberra, Australia), B.W. Skelton and A.H. White (Nedlands, Australia) 89

1,3-Asymmetric induction by planar chiral (η^4-diene)$Fe(CO)_3$ complexes in Diels–Alder reaction
S. Nakanishi, K. Kumeta, Y. Sawai and T. Takata (Osaka, Japan) 99

Synthesis, reactivity and X-ray molecular structure of the activated ester complex $[(\eta^5\text{-}C_5H_4COONS)Co(CO)_2]$ (NS = N-succinimidyl)
H. El Amouri, Y. Besace, J. Vaissermann and G. Jaouen (Paris, France) 103

Reactions of orthomanganated aryl ketones with SO_2: synthesis and structural characterisation of a novel six-membered metallocyclic ring and a new route to aryl sulfonates
J.M. Cooney, C.V. Depree, L. Main and B.K. Nicholson (Hamilton, New Zealand) 109

Tin(IV) and organotin(IV) complexes containing mono or bidentate N-donor ligands. II. 4-Phenylimidazole derivatives. Crystal and molecular structure of [bis(4-phenylimidazole) trimethyltin(IV)] chloride
C. Pettinari, F. Marchetti, M. Pellei, A. Cingolani (Camerino, Italy), L. Barba and A. Cassetta (Trieste, Italy) 119

Dichlorodiphenylantimony(V) derivatives of oxo- and thioimidodiphosphinic acids, containing novel inorganic SbO_2P_2N and $SbOSP_2N$ rings: crystal and molecular structures of $Ph_2SbCl_2[(OPPh_2)(XPPh_2)N]$ (X = O, S)
C. Silvestru, R. Rösler, I. Haiduc (Cluj-Napoca, Romania), R.A. Toscano (México, Mexico) and D.B. Sowerby (Nottingham, UK) 131

Reactions of the cationic bis(chelate)rhodium complex $[Rh(P\widehat{\ }O)_2]^+$ with SO_2, CS_2 and O_2/SO_2
E. Lindner, B. Keppeler, H.A. Mayer and K. Gierling (Tübingen, Germany) 139

Pyrolysis of $Ru_3(\mu\text{-dppm})(CO)_9(PPh_3)$: formation of novel Ru_4 and Ru_3 clusters
M.I. Bruce, N.N. Zaitseva (Adelaide, Australia), B.W. Skelton and A.H. White (Nedlands, Australia) 143

Synthesis, spectroscopic and structural characterisation of $[(CO)_3Fe(\mu\text{-}CH_2)Se]_2$ and $(CO)_6Fe_2(\mu\text{-}Se(CH_2)_nSe)$ (n = 1, 2)
P. Mathur, Bala. Manimaran, R. Trivedi, M. Hossain and M. Arabatti (Bombay, India) 155

Synthesis, chirooptical properties and catalytic activity of diene–rhodium(I) and –iridium(I) cationic complexes containing binaphthyl, C_2-symmetric diamine ligands
P. Pertici, F. D'Arata (Pisa, Italy) and C. Rosini (Potenza, Italy) 163
Hydrocarbon bridged metal complexes. XXXIV. Synthesis, structure and attempted decarbonylation of a *trans* 11,12-bis(dicarbonylcyclopentadienylironacyl) substituted dihydro 9,10-ethanoanthracene
V. Weinrich, A. Geisbauer, K. Sünkel and W. Beck (München, Germany) 173
Inter- vs. intramolecular rearrangement of a $(Bu_3P)_2Ni$ moiety in its 9-alkyl and 9,10-dialkyl anthracene complexes. Limiting conditions and isomer stabilities
A. Stanger and H. Weismann (Haifa, Israel) 183
Linking metal centres with 1,4-bis(diphenylphosphino)but-2-yne (DPPBu): syntheses and molecular structures of $[\{Mo(CO)_4(\mu\text{-DPPBu})\}_2]$ and $[\{Mo(CO)_4(\eta^2\text{-DPPBu})\}_3\{Mo(CO)\}]$
G. Hogarth and J.Y. Pang (London, UK) 193
Electrospray mass spectrometric studies of some heterometal anionic carbonyl clusters
M. Ferrer, R. Reina, O. Rossell, M. Seco and G. Segalés (Barcelona, Spain) 205
Metal polypyrazolylborates. X. Thienylmercury(II) derivatives: the X-ray crystal structure of $[(5\text{-Me})\text{Thien-2-yl}]Hg\text{-}(\mu\text{-Pz})_2B(Pz)_2$
G. Gioia Lobbia (Camerino, Italy), P. Cecchi (Viterbo, Italy), F. Giordano (Napoli, Italy) and C. Santini (Camerino, Italy) 213
Organomercury(II) and organotin(IV) compounds with nitrogen-containing substituents
P.-A. Bonnardel and R.V. Parish (Manchester, UK) 221
Insertion into the nickel–carbon bond of N–O chelated arylnickel(II) complexes. The development of single component catalysts for the oligomerisation of ethylene
S.Y. Desjardins, K.J. Cavell, H. Jin (Hobart, Australia), B.W. Skelton and A.H. White (Nedlands, Australia) 233
Photoredox chemistry of bismuth trichloride in benzene
K. Oldenburg and A. Vogler (Regensburg, Germany) 245
Rotational isomerism in tetramethyldistibane studied by UV photoelectron spectroscopy
B. Sztáray, A. Nagy, L. Szepes (Budapest, Hungary) and H.J. Breunig (Bremen, Germany) 249
Alkyl- and aryl-sulphinylmethylgermanium compounds $Ph_3GeCH_2S(O)R$: structure of $Ph_3GeCH_2S(O)C_6H_4{}^tBu\text{-}p$
J.L. Wardell (Old Aberdeen, UK) and P.J. Cox (Aberdeen, UK) 253

Preliminary Communication
Bis(4-pyridylethynyl)mercury
B.F. Hoskins, R. Robson and E.E. Sutherland (Parkville, Australia) 259

Author Index 261

Subject Index 263

Conference Calendar 271

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.